

Remarks

The above-noted Official Action and the references cited therein have been received and carefully studied.

Entry of the foregoing amendment and reconsideration of the application in view of the above amendment and the following remarks is hereby requested.

Claims 1-34 are now in this case.

Claims 1, 3, 4, 6-9, 11-15, 19, 21, 22, 25, 28, 30, 31, and 34 are currently amended herein.

Claims 2, 5, 10, 16-18, 20, 23, 24, 26, 27, 29, 32, and 33 remain in the case as originally filed.

The claims in the case which are independent claims are claims 1, 28, and 30. It is noted that all independent claims in the case are currently amended herein to provide that a remote temperature sensing unit, which receives power waves from a base unit, includes a temperature dependent crystal material that is directly connected to an antenna and that emits communication waves that represent temperature to a base unit. Original claims that have not been amended are dependent upon the currently amended independent claims.

Now turning to the Official Action dated 04/12/2005, the Examiner, in enumerated paragraph 1, objected to Claims 3, 4, 5-

9, and 11-15 for reasons of informalities. In this respect, Claims 3, 4, 6-9, and 11-15 have been amended to include the following language or equivalent: to determine whether said specific monitored temperature is equal to or is beyond the predetermined alarm temperature. As a result, it is respectfully submitted that the objections based on informalities be withdrawn.

Now turning to Examiner's rejection of the Applicant's originally claimed invention, the Applicant's representative states that, in summary, the Examiner, in enumerated paragraphs 3, 4, and 6-13 rejected all of the originally filed claims 1-34.

However, in the present AMENDMENT, it is respectfully asserted by the Applicant's representative that the grounds for the Examiner's rejection of the Applicant's originally claimed invention are now inapplicable in view of the Applicant's currently amended claimed invention. By the discussion hereinbelow, this assertion of the Applicant's representative is fully supported.

In this respect, herein, the Applicant's representative points out key features and distinctions between (a) the prior art that was applied by the Examiner in the rejection of the Applicant's originally claimed invention and (b) the Applicant's currently amended claimed invention.

More specifically, in the Official Action dated 04/12/2005, the Examiner, in enumerated paragraph 3 , rejected originally filed claims 1, 16-17, 19-21, and 34 under 35 USC § 102 as being anticipated by O'Toole et al (6,130,602) .

The Examiner, in enumerated paragraph 4, rejected originally filed claim 31 under 35 USC § 102 as being anticipated by Lesho et al (4,844,076) .

The Examiner, in enumerated paragraph 6, rejected originally filed claim 2 under 35 USC § 103 as being unpatentable over O'Toole et al (6,130,602) in view of Brune et al (6,059,733) .

The Examiner, in enumerated paragraph 7, rejected originally filed claims 3 and 7-8 under 35 USC § 103 as being unpatentable over O'Toole et al (6,130,602) in view of Lesho et al (4,844,076) .

The Examiner, in enumerated paragraph 8, rejected originally filed claims 4-5 and 18 under 35 USC § 103 as being unpatentable over O'Toole et al (6,130,602) in view of Lesho et al (4,844,076) and in further view of Lastinger (6,104,311) .

The Examiner, in enumerated paragraph 9, rejected originally filed claims 6, 9-10, and 28-30 under 35 USC § 103 as being unpatentable over O'Toole et al (6,130,602) in view of Smrke (5,951,900) .

The Examiner, in enumerated paragraph 10, rejected originally filed claims 11-15 under 35 USC § 103 as being unpatentable over O'Toole et al (6,130,602) in view of Tuttle

(5,995,898). The Examiner, in enumerated paragraph 11, rejected originally filed claims 22-27 under 35 USC § 103 as being unpatentable over O'Toole et al (6,130,602) in view of Lesho et al (4,844,076) in view of Olivas (6,646,567) and further in view of Lichtblau (3,810,147).

The Examiner, in enumerated paragraph 12, rejected originally filed claim 32 under 35 USC § 103 as being unpatentable over Lesho et al (4,844,076) in view of Olivas (6,646,567).

The Examiner, in enumerated paragraph 13, rejected originally filed claim 33 under 35 USC § 103 as being unpatentable over Lesho et al (4,844,076) in view of Olivas (6,646,567) and in further view of Lichtblau (3,810,147).

From the rejections applied by the Examiner, and from other disclosures of the Examiner, here is a list of the U. S. patents and published patent application, that the Examiner cited. The references are listed in order of mention by the Examiner:

6,130,602	O'Toole et al
4,844,076	Lesho et al
6,059,733	Brune et al
6,104,311	Lastinger
5,951,900	Smrke
5,995,898	Tuttle
6,646,567	Olivas

3,810,147 Lichtblau
20010045899 Hoek
6,632,175 Marshall

Hereinbelow are comments of the Applicant's representative relating to the references cited by the Examiner along with comments distinguishing the references from the Applicant's currently amended claimed invention.

More specifically, O'Toole et al (6,130,602) disclose a radio frequency data communication device, which is a radio frequency identification device (RFID). The device includes an active transponder which does not rely on magnetic coupling for power. The device is used for inventory control, object monitoring, or for determining the existence, location, or movement of objects. Even as pointed out by the Examiner, O'Toole et al (6,130,602) has a remote emission unit which is a radio frequency data communication device 12, a separate and distinct temperature dependent material which is temperature sensor (tsn), and a threshold dependent alarm which is an alarm. Beyond what the Examiner pointed out, O'Toole et al (6,130,602) provides that another aspect of their invention provides "a radio frequency identification device comprising a monolithic semiconductor integrated circuit including a receiver and a transmitter; means for applying a supply of power to the integrated circuit device from a battery [emphasis added]; and

means for configuring the integrated circuit to receive and transmit radio frequency signals. With respect to the battery, O'Toole et al (6,130,602) also provide for circuitry for detecting low battery voltage and warning of low battery voltage. The separate and distinct radio frequency data communication device 12 and temperature sensor (tsn) in O'Toole et al (6,130,602) and the presence of a battery for supplying electric power to integrated circuitry clearly teach away from the currently amended language in claim 1 wherein said material having a temperature-dependent communication wave emission characteristic is powered by said energizing wave from said base-located energizing wave transmission/communication wave reception unit. Clearly, with the Applicant's currently claimed invention, power is provided to the tag/transponder 14 by the reader/interrogator 12, and the tag/transponder 14 has no power supply of its own; that is, the tag/transponder 14 has no battery.

Lesho et al (4,844,076) disclose an ingestible size continuously transmitting temperature monitoring pill. The pill includes its own independent battery power supply. A temperature sensing crystal is powered by the battery power supply, and, in addition, an electronic oscillator circuit responds to the temperature sensing crystal and is also powered by the battery power supply. There is no base unit that generates waves that

energize the pill. The disclosures in Lesho et al (4,844,076) are in sharp contrast with the Applicant's currently claimed invention wherein a resonating crystal in a remote ingestible pill derives its power remotely from a signal transmitted by a base unit. With the Applicant's currently claimed invention, the remote tag does not include its own battery power supply. Also, with the Applicant's currently claimed invention, the temperature-dependent resonating crystal in the remote pill is not connected to an oscillator circuit that responds to the resonating crystal. Instead, the resonating crystal itself inherently transmits a temperature-dependent resonating frequency. Also with the Applicant's currently claimed invention, the resonating crystal is directly connected to an antenna which emits communication waves to the base unit.

Brune et al (6,059,733) disclose a method of determining a physiological state of a ruminant animal using an ingestible bolus. The device can be used for measuring temperature. A temperature sensor and a transmitter are placed in the animal's stomach. From a reading of Brune et al (6,059,733) it is clear that the temperature sensor and the transmitter are a self-powered unit. There is no disclosure of temperature sensor and transmitter being powered by wave power from the receiver unit. Therefore, it is clear that Brune et al (6,059,733) do not disclose a remote tag that is remote from a base unit, wherein

the remote tag receives wave energy from the base unit, and wherein the received wave energy powers the remote tag to transmit a responsive wave communication back to the base unit, as provided by the Applicant's currently claimed invention. Also with the Applicant's currently claimed invention, in the remote tag, a temperature dependent crystal is directly connected to an antenna which emits the communication waves carrying temperature information which are received in the base unit.

Lastinger (6,104,311) discloses an information storage and identification tag. Referring again to FIG. 2, code circuits 26 may be active or passive. If passive, they are energized by the query signals and, using this energy, output the response codes to the antennas. Thus, if antennas 24 are configured to receive and transmit radio frequency signals, tag 20 may be described as a passive radio frequency (RF) ID tag. More specifically, being passive, the resonant circuit of FIG. 11 derives its power from the RF signal generated by the RF transmitter, reader 32 (FIG. 2). The capacitor and the antenna form a resonant circuit that resonates at a specific frequency. Specifically, capacitor 40 alternatively charges and discharges at a specific rate, when the signal received from antenna 24 matches the rate of the antenna/capacitor circuit, the circuit resonates and generates a response signal. The RF frequency for which the circuit responds may be broadly adjusted by changing the length of the antenna

pattern and finely adjusted by changing the value of the capacitor 40. As just stated, the RF frequency for which the circuit responds may be broadly adjusted by changing the length of the antenna pattern and finely adjusted by changing the value of the capacitor 40 [emphasis added]. These steps to be taken in Lastinger (6,104,311) require extrinsic or external intervention for modification of the passive radio frequency (RF) ID tag in order to change the resonant frequency of the passive radio frequency (RF) ID tag. This is in sharp contrast to the Applicant's currently claimed invention wherein the resonant RF frequency changes as a result of an inherent internal RF frequency change in a temperature dependent material whose resonant RF frequency changes as a result of a change in the temperature experienced by the temperature material. Also with the Applicant's currently claimed invention, in the remote tag, a temperature dependent crystal is directly connected to an antenna which emits the communication waves carrying temperature information which are received in the base unit. Such features not taught or suggested in Lastinger (6,104,311).

Smrke (5,951,900) discloses an automatic temperature measurement based power control device. Each portable unit 20 or universal electronic control unit 28 or portable unit 10 has its own power supply section 33, sensor section 32, receiver section 30, and transmitter section 31 (column 4, lines 1-5). The

disclosures in Smrke (5,951,900) are in sharp contrast with the Applicant's currently claimed invention wherein each remote tag does not have its own power supply section. Moreover, with the Applicant's currently claimed invention, the temperature-dependent resonating crystal serves as a combination receiver, sensor, and transmitter in a single unified, integrated structure. Also with the Applicant's currently claimed invention, in the remote tag, a temperature dependent crystal is directly connected to an antenna which emits the communication waves carrying temperature information which are received in the base unit. Such features are neither taught nor suggested in Smrke (5,951,900).

Tuttle (5,995,898) discloses a radio frequency identification device (RFID) system in communication with a vehicle on-board computer. All of the sensors placed at various locations on the vehicle and the on-board computer are all powered by the vehicle battery. Also, all of the sensors are hard-wired to the computer. There is no wireless or wave communication between the sensors and the on-board computer. Clearly, Tuttle (5,995,898) does not disclose a remote tag that is remote from a base unit, wherein the remote tag receives wave energy from the base unit, and wherein the received wave energy powers the remote tag to transmit a responsive wave communication

back to the base unit, as provided by the Applicant's currently claimed invention.

Olivas (6,646,567) discloses a wireless telematic thermometer for remote measurement of temperature in a human. A remote probe, called a transmitting module, communicates temperature information to a base unit, called a receiving module. The transmitting module, shown schematically in Fig. 1. To quote from Olivas (6,646,567):

"...the thermometer uses an appropriate probe as a means of measuring the temperature, which is preferably constituted by a variable temperature coefficient resistance, preferably of the NTC type, which is indicated by the reference (4) in the plan of FIG. 1. In the practical embodiment of the invention, this negative temperature coefficient (NTC) is housed inside, and in contact with, a small capsule made of very heat conductive metal, so that any temperature variation of the body to be controlled will cause a corresponding variation in the resistive value of the probe (4), and so that this variation may be interpreted and translated by means of the microprocessor (1) in the corresponding code indicating this new temperature value.

The numerical reference (5) indicates a condenser, whose capacity will have a high value and will be determined

according to the consumption of the rest of the circuit. As mentioned above, the circuit's consumption is very low, the charge of the said condenser being sufficient to maintain the power supply of the transmitting module for a long period of time, which should preferably be a minimum of 12 hours. As will be understood, a condenser is a passive element which is capable of being recharged without any difficulty, by means of applying the corresponding difference of potential to its terminals. This recharging, in the case of the present invention, will be carried out from the receiving module, through appropriate electrical contacts, which in the receiver are indicated by the references (A, B, C, D and E) and which may also be used for carrying out other functions, as explained above."

Clearly, in Olivas (6,646,567), the condenser (5) in the transmitting module serves as a self-contained power supply for the transmitting module. When the self-contained power supply becomes depleted in power, the transmitting module is physically electrically connected to the receiving module to recharge the condenser (5). In view of the above it is clear that Olivas (6,646,567) does not disclose a remote tag that is remote from a base unit, wherein the remote tag receives wave energy from the base unit, and wherein the received wave energy powers the remote tag to transmit a responsive wave communication back to the base

unit, as provided by the Applicant's currently claimed invention.

Lichtblau (3,810,147) discloses an electronic security system which employs a plurality of tags or retail articles, and each of the tags has a circuit that resonates at a particular frequency. That is, each tag has a single resonant circuit. The disclosures in Lichtblau (3,810,147) are in sharp contrast with the Applicant's currently claimed invention wherein a single tag has a range of individual resonant frequencies, and each individual resonant frequency is temperature dependent, such that with the Applicant's currently claimed invention, the individual resonant frequencies are representative of temperature changes in a specific tag. Moreover, with Lichtblau (3,810,147), for each tag, the specific resonant circuit in a tag is intentionally destroyed by a temperature rise intentionally imposed on the tag by a base unit that causes a fusible link to melt. Clearly, such a device cannot be used to monitor temperature in a tag in response to an ambient temperature rise. This is in sharp contrast with the Applicant's currently claimed invention wherein the ambient temperature is monitored by a tag, and the resonant frequency of a specific tag varies as the ambient temperature varies.

Hoek (20010045899) discloses a device for passive biotelemetry. There is a disclosure therein that known devices

for invasive measurements of physiological variables are examples of passive systems, i.e. the sensor inside the body does not require a source of energy, such as a battery or electricity provided via electrical leads. More specifically, with Hoek (20010045899), as disclosed in claim 1, a biotelemetry system is provided for measuring a physiological variable within a living body, including a radio frequent energy transmitter (1) to be disposed outside of the body, a radio frequent energy receiver (3) to be disposed outside of the body, and a transponder unit (2; 22; 72; 82) including a sensor (11; 31; 75; 85; 41, 43, 47) sensitive to the physiological variable, which transponder unit is characterized by a modulator unit (12; 32; 45; 74, 76, 77, 78; 81, 83, 84) for controlling the radio frequent energy absorption of the transponder unit according to a time-sequence representing said physiological variable.

More specifically, as stated in claim 2 of Hoek (20010045899), the transponder unit (2; 22; 72; 82) comprises a transponder antenna (7; 28; 71; 88) and a rectifier (9; 29; 73; 87), said antenna and rectifier forming a power supply for the sensor and the modulating unit.

More specifically, as stated in claim 15 of Hoek (20010045899), the transponder unit comprises a transponder antenna (71), a rectifier (73), a capacitive sensor (75), inverters (76, 77, 78), and a resistor (74). In this respect,

the sensor is capacitive sensor (75), and the modulator unit includes inverters (76, 77, 78), and a resistor (74).

More specifically, in Hoek (20010045899), in FIG. 7 is shown a second embodiment of the communication system according to the invention. The transponder unit 22 corresponds to the transponder unit 2 of FIG. 1, and includes a transponder antenna 28, rectifier 29, low-pass filter 30, microsensor 31, modulator 32, and switch 33.

More specifically, in Hoek (20010045899), in FIG. 9 is shown a detailed circuit diagram of yet another embodiment of a transponder unit 82, comprising a resistive sensor 85, a rectifier 87 consisting of a diode and a capacitor, an operational amplifier 81, two other resistors 83, 84, a capacitor 86 and a transponder antenna 88. Analogous to the circuit described above with reference to FIG. 8, the circuit on FIG. 9 generates a square wave, the period of which is determined by the passive components of the circuit, e.g. the resistance of the sensor 85.

More specifically, as stated in claim 7 of Hoek (20010045899), the transponder unit comprises a resistive sensor (85), a rectifier (87), an operational amplifier (81), resistors (83, 84), a capacitor (86); and a transponder antenna (88). In this respect, the sensor is resistive sensor (85), and the modulator unit includes an operational amplifier (81) and resistors (83, 84).

More specifically in Hoek (20010045899), a selected number of microsensors 41, 43, 47 (three being shown as an example in FIG. 10, and additional microsensors being suggested by a dotted line), each one responding to one or several of the physiological variables to be studied, are provided. Each sensor 41, 43, 47 provides a signal representative of at least one physiological variable to a multiplexer 44 which sequentially or according to some other predetermined rule connects each sensor to a modulator 45 and a switch 46. The operational principle of the modulator 45 and the switch 46 is analogous to the previously described modulator 12 and switch 8 of FIG. 1. The sequence in which individual sensors 41, 43, 47 are connected to the modulator 45 may either be based on a free-running oscillator (not shown) included in the modulator and sensor unit 42, or be triggered by an addressing routine embedded in the power emission from the transmitter unit, e.g. by frequency or amplitude modulation of the power emission. Thus, many configurations are possible for controlling the transmission of a monitored value from a sensor, but common to all such configurations is that a microcontroller 47 is connected to the multiplexer 44 to provide digital control of the addressing routines.

From the discussion of Hoek (20010045899) above, a number of important distinctions exist between Hoek (20010045899) and the Applicant's currently claimed invention. With whatever transponder that is disclosed in Hoek (20010045899), a

transponder antenna (7; 28; 71; 88) and a rectifier (9; 29; 73; 87) form a power supply for the sensor and the modulating unit. This is sharp contrast with the Applicant's currently claimed invention wherein the tag/transponder 14 includes a antenna/crystal circuit 22 which includes an antenna 32 connected directly to a crystal 34. Also, with the Applicant's currently claimed invention, there is no combination of an antenna and rectifier to form a power supply. Also, with the Applicant's currently claimed invention, there is no modulator unit.

Furthermore, with Hoek (20010045899) the only employment of a quartz crystal 17 or 34 is in a transceiver (base unit). There is no disclosure of a quartz crystal being used in a transponder (tag/transponder 14) as provided by the crystal 34, in the Applicant's currently claimed invention. With Hoek (20010045899), there is simply no consideration of a crystal 34 to be used as a sensor in a transponder, as provided by the Applicant's currently claimed invention.

Another way of contrasting the Applicant's currently claimed invention with Hoek (20010045899) is to realize that with Hoek (20010045899), there is considerable circuitry intervening between a crystal and an antenna. This is in sharp contrast with the Applicant's currently claimed invention wherein there are no intervening components between the crystal and the antenna. More specifically, with the Applicant's currently claimed invention, there is a direct connection of a crystal and an antenna.

Marshall (6,632,175) discloses a swallowable data recorder capsule medical device. As shown in Fig. 3, a swallowable data recorder capsule medical device 10 includes sensors 50, 52, controller 54, memory 56, optional programmable logic 58, power supply 60, and communication interface 62. Clearly, the Marshall (6,632,175) device is distinct from the Applicant's currently claimed invention. Whereas the swallowable data recorder capsule medical device 10 of Marshall (6,632,175) includes sensors 50, 58, a power supply 60, and communication interface 62, in sharp contrast, the Applicant's currently claimed invention provides a tag/transponder 14 which simply includes an antenna 32 connected directly to a crystal 34. In essence the simple combination of the antenna 32 and the crystal 34 of the Applicant's currently claimed invention serves as both a sensor and communication device without the need for the Marshall (6,632,175) power supply and communication interface.

Having discussed the references and having compared each reference with the Applicant's currently claimed invention, it is clear that there are two classes of wireless remote tags.

In a first class of wireless remote tags, the wireless remote tags have a battery for electric power of the respective tags. Such wireless remote tags can be referred to as "active" wireless remote tags. The references discussed above which

disclose "active" wireless remote tags are: O'Toole et al (6,130,602), Lesho et al (4,844,076), Brune et al (6,059,733), Smrke (5,951,900), and Olivas (6,646,567).

In a second class of wireless remote tags, the wireless remote tags do not have their own source of electric power. Instead, these wireless remote tags receive their electric power through wireless waves from a base unit. Such wireless remote tags can be referred to as "passive" wireless remote tags. The references discussed above which disclose "passive" wireless remote tags are: Lastinger (6,104,311), Lichtblau (3,810,147), Hoek (20010045899), and Marshall (6,632,175).

Clearly, the Applicant's currently claimed invention is in the second class of wireless remote tags, the "passive" wireless remote tags.

Taking both "passive" and "active" prior art wireless remote tags together, there are a wide variety of environments in which the wireless remote tags are deployed. Such environments include living things (such as animals and humans) and non-living things (such as retail merchandise and motor vehicles). Similarly, the "passive" wireless remote tags of the Applicant's currently claimed invention can be used a wide variety of environments such as living things and non-living things.

Again, taking both "passive" and "active" prior art wireless remote tags together, there are a wide variety of parameters for which the wireless remote tags are employed for monitoring.

Among those remotely monitored parameters, the monitoring of temperature is included. In this respect, specifically, the "passive" wireless remote tags of the Applicant's currently claimed invention are used for the remote monitoring of temperature.

Now comes a key question.

How are the "passive" wireless remote temperature-monitoring tags of the Applicant's currently claimed invention patentably distinct from the "passive" wireless remote temperature-monitoring tags in the prior art?

The key answer rests on two aspects of the Applicant's currently claimed invention: (a) simplicity of the Applicant's currently claimed invention over the prior art; and (b) discarding or eliminating parts that are required in the prior art.

In these respects, the Applicant's currently claimed invention provides simplicity in structure and mode of operation compared to the prior art of "passive" wireless remote tags to accomplish the overall same function of the prior art. Also, the Applicant's currently claimed invention discards or eliminates parts that are required for operation of "passive" wireless remote tags in the prior art.

More specifically, the "passive" wireless remote temperature-monitoring tags in the prior art are complex structures that operate in complex ways to provide a result of

sending temperature-monitoring information to a base unit. In sharp contrast, the Applicant's currently claimed invention provides "passive" wireless remote temperature-monitoring tags which are simple in structure and simple in mode of operation to provide the result of sending temperature-monitoring information to a base unit.

Even more specifically, whereas the prior art "passive" wireless remote temperature-monitoring tags, taken as a whole, employ complex combinations of separate and distinct antennas, temperature sensors, rectifiers, transistors, resistors, operational amplifiers, modulation units, and quartz crystals, in sharp contrast, the Applicant's currently claimed invention employs a simple combination of an antenna connected to a crystal to serve as a "passive" wireless remote temperature-monitoring tag.

Viewing the differences between the prior art and the Applicant's currently claimed invention somewhat differently, both the prior art "passive" wireless remote temperature-monitoring tags and the Applicant's currently claimed invention "passive" wireless remote temperature-monitoring tags must both perform the following functions: (a) receive power waves from the base unit; (b) sense changes in temperature at the remote location of the "passive" wireless remote temperature-monitoring tag; and (c) convert sensed changes in temperature into communication waves that are emitted to the base unit.

With the prior art "passive" wireless remote temperature-monitoring tags, there are three separate and distinct sets of electrical components. A first set of electrical components (a) receives power waves from the base unit; a second set of electrical components (b) senses changes in temperature at the remote location of the "passive" wireless remote temperature-monitoring tag; and a third set of electrical components (c) converts sensed changes in temperature into communication waves that are emitted to the base unit. Moreover, complex interrelationships exist between the three distinct sets of electrical components.

In sharp contrast, with the Applicant's currently claimed invention, there is only one set of electrical components, an antenna directly connected to a crystal, which accomplishes all of the three functions of (a) receiving power waves from the base unit; (b) sensing changes in temperature at the remote location of the "passive" wireless remote temperature-monitoring tag; and (c) converting sensed changes in temperature into communication waves that are emitted to the base unit. Such simplification in structure and mode of operation of the Applicant's currently claimed invention of a "passive" wireless remote temperature-monitoring tag over the complex structure and mode of operation in the prior art for providing communication waves to the base unit which carry temperature-monitoring information is clearly patentable over the prior art.

Stated somewhat differently, with the Applicant's currently claimed invention, the direct connecton of the crystal to the antenna eliminates the need for complex, intervening circuitry between an antenna and a crystal. More specifically, as a result of the Applicants direct connection between the crystal and the antenna, the complex intervening structures between a crystal and an antenna of the prior art are eliminated. By eliminating the complex intervening structures between a crystal and an antenna of the prior art, both (a) simplicity and (b) discarding or eliminating parts of the prior art are obtained.

Finally, there are time-honored and long-accepted principles in patent law, supported by many cases, that (a) simplicity and (b) discarding or eliminating parts of an Applicant's claimed invention are strong indicators of nonobviousness of the Applicant's claimed invention over the prior art.

Before closing, here are additional considerations, that weigh heavily on the side of allowing the claims of the Applicant's currently claimed invention.

a. None of the temperature-dependent remote tags disclosed in the cited prior art will function at the high temperatures of an oven, whereas the crystal and antenna combination of the Applicant's currently claimed invention, as described in detail in the Applicant's specification, will function at those high oven temperatures.

b. It is contemplated that a high temperature capacitor may be used by the Applicants to tune the circuit between the crystal and the antenna. Such a capacitor would be connected across the direct connection between the crystal and the antenna, so that the crystal and the antenna remain connected directly together, in accordance with the Applicant's currently claimed invention.

No additional fees are due with respect to this AMENDMENT. However, a PETITION FOR REQUEST FOR EXTENSION OF TIME, for a ONE-month extension of time, is filed currently herewith, including a payment in the amount of \$60.00.

On the basis of the above amendment and remarks, reexamination and reconsideration of the application is requested.

It appears that all matters have been addressed satisfactorily, and that the case is now in condition for a complete allowance; and the same is respectfully urged.

In view of the foregoing, it is respectfully requested that claims 1-34 be deemed allowable. If the Examiner believes otherwise, or has any comments or questions, or has any suggestions for putting the case in condition for final allowance, the Examiner is respectfully urged to contact the

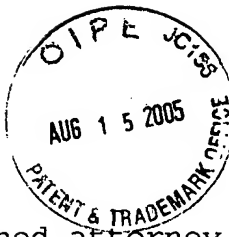
undersigned attorney of record at the telephone number below, so that an expeditious resolution may be effected and the case passed to issue promptly.

Respectfully submitted,

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